### Title V

# **Model General Permit Template**

### **SERIES 2 LOADING RACKS**

# Template # SJV-LR-2-0

organic liquid loading racks

facilities loading 4,000 or more, but less than 20,000 gallons of an organic liquid on any one day into tank trucks, trailers, or railroad tank cars

true vapor pressure of any organic liquid being loaded greater than or equal to 1.5 psia

This template is designed to streamline the Title V permitting process for loading racks meeting the above qualifications. Applicants for Title V permits choosing to use this template will only have to complete the enclosed template qualification form and submit it with their Title V application.

# **San Joaquin Valley Unified Air Pollution Control District**

# Final Title V Model General Permit Template Series 2 Loading Racks

**Template No: SJV-LR-2-0** 

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# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

### TITLE V GENERAL PERMIT TEMPLATE SJV-LR-2-0

### **ENGINEERING EVALUATION**

### **TABLE OF CONTENTS**

SECTION	PAG	<u>GE</u>
I. PURPOSE		1
II. TEMPLATE APPLICABILITY		1
III. APPLICABLE REQUIREMENTS		1
IV. COMPLIANCE		3
V. PERMIT SHIELD		7
VI. PERMIT CONDITIONS		7
APPENDIX ADefinitions	<b>A-1</b>	
APPENDIX BCounty Rule / District Rule 1081 Comparison	B-1	
APPENDIX CEPA Comments / District Response	C-1	
APPENDIX DTemplate Qualification Form	TQF-1	

### I. Purpose

The purpose of the proposed template is to streamline the Title V permitting process by identifying the federally applicable requirements for certain loading racks and to establish permit conditions which will ensure compliance with such requirements. These conditions will be incorporated into the Title V permit of any facility choosing to make use of the template.

### II. Template Applicability

The template applies to organic liquid loading facilities:

Loading 4,000 or greater, but less than 20,000 gallons of organic liquid on any one day into tank trucks, trailers, or railroad tank cars, and

True vapor pressure of any organic liquid being loaded is greater than or equal to 1.5 psia.

The applicability of this template is determined by completion of the Template Qualification Form (TQF) attached as Appendix D. The completed and signed TQF must be submitted with the Title V application.

### III. Applicable Requirements

Units may be subject to "federally enforceable " requirements as well as requirements that are enforceable by the "District-only." Federally enforceable requirements will be enforceable by the EPA, the District, and the public through Title V permit conditions identified as federally enforceable. District-only requirements represent local or state regulations for which the EPA has no direct enforcement authority. The final Title V permits issued by the District will contain both federally enforceable and District-only requirements.

District-only requirements are not addressed in this template except for those used in streamlining of multiple requirements (see discussion in section IV). District-only requirements used in streamlining of multiple requirements will become federally enforceable. Table 1, <u>Applicable Requirements</u>, does not necessarily include all federally enforceable requirements that apply to loading racks qualifying to use this template, and it is the source's responsibility to determine any and all applicable requirements to which the source is subject. Generally, requirements not addressed by this template are those that require a source-specific analysis, or are covered by other templates.

**Table 1. Applicable Requirements** 

Rule Category	Rule/Regulation	Citation	Description
А	County Rule	108.1 <sup>1</sup>	Source Sampling
А	County Rule	110 <sup>2</sup>	Source Sampling
А	County Rule	108 <sup>3</sup>	Source Sampling
А	County Rule	412 <sup>4</sup>	Organic Liquid Loading
А	SJVUAPCD Reg. IV	4621 <sup>5</sup>	Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants
А	SJVUAPCD Reg. IV	4624	Organic Liquid Loading
А	SJVUAPCD Reg. II	2520, 9.1, 9.4.2, 9.5.2, 13.2	Operational, Monitoring and Recordkeeping Requirements, and Permit Shields
В	SJVUAPCD Reg. II	2201	New Source Review Rule
В	SJVUAPCD Reg. II	2520 <sup>6</sup>	Federally Mandated Operating Permits
В	SJVUAPCD Reg. IV	4101 <sup>7</sup>	Visible Emissions
В	SJVUAPCD Reg. IV	4621, section 5.28	Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants
В	NESHAP Subpart CC	40CFR§63.640	National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
С	County Rule	412 <sup>9</sup>	Organic Liquid Loading
С	County Rule	413 <sup>10</sup>	Organic Liquid Loading
С	County Rule	419 <sup>11</sup>	Organic Liquid Loading
С	SJVUAPCD Reg. IV	4661	Organic Solvents
С	NSPS Subpart XX	40CFR§60.500	Standards of Performance for Bulk Gasoline Terminals
С	NESHAP Subpart R	40CFR§63.420	National Emission Standards for Gasoline Distribution Facilities
D	SJVUAPCD Reg. I	1081	Source Sampling

Category "A" rules contain requirements that are directly applicable to the qualifying units; compliance with these applicable requirements will be demonstrated in this engineering evaluation and assured by the template permit conditions. In section IV, <a href="Compliance">Compliance</a>, the federally-enforceable requirements from category "A" rules are listed with a discussion of how compliance with these requirements is achieved.

<sup>&</sup>lt;sup>1</sup> Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus

<sup>&</sup>lt;sup>2</sup> Madera

<sup>&</sup>lt;sup>3</sup> Kings

<sup>&</sup>lt;sup>4</sup> Fresno and Kings

<sup>&</sup>lt;sup>5</sup> This template addresses compliance with section 5.2 of this rule only for tank trucks and trailers.

<sup>&</sup>lt;sup>6</sup> Other than Category A requirements

<sup>&</sup>lt;sup>7</sup> Portions of this rule are addressed in the facility-wide template SJV-UM-0-0.

<sup>&</sup>lt;sup>8</sup> Compliance with section 5.2 (vapor tightness) for any delivery vessel, excluding tank trucks and trailers, must be demonstrated by the source outside of this template (i.e. for railroad cars). If only tank trucks and trailers are used for delivery, the source must propose a condition on their source specific Title V application stating such.

<sup>&</sup>lt;sup>9</sup> Merced, San Joaquin, and Stanislaus

<sup>&</sup>lt;sup>10</sup> Kern and Tulare

<sup>&</sup>lt;sup>11</sup> Madera

Category "B" rules contain federally enforceable requirements (aside from those listed as Category A) that were not addressed in this template. These may not be all of the federally enforceable requirements for this unit. Requirements from these rules must be addressed by the applicant outside of this template within the Title V application Compliance Plan form (TVFORM-004). Category "B" listing is included in this table as an informational item to assist applicants in this effort.

Category "C" rules contain requirements which have been determined not to be applicable to qualifying units. A permit shield is proposed for the category "C" rules. An explanation of the determination of non-applicability of Category "C" rules is included in section V, Permit Shield.

Category "D" rules are District rules which are used to show compliance with federally enforceable requirements, and therefore some requirements from these rules will become federally enforceable through the use of this template.

### **IV.** Compliance

This section contains a discussion of how compliance is assured with each requirement addressed in this template.

#### District Rule 1081 and County Rules 108, 108.1, and 110

District Rule 1081 has been submitted to the EPA to replace each of the county rules in the SIP: Rule 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera). Appendix B lists all of the applicable requirements of District Rule 1081 and shows which are included in the rule from each county. This table shows that District Rule 1081 is more stringent than each of these county rules.

Sections 3.0, 4.0, 5.0, 6.0, and 7.0 set forth requirements for sampling facilities, collection of samples, test methods, test procedures, and administrative requirements, respectively. These requirements are covered by template permit condition #1.

#### District Rule 2520, 9.1, 9.4.2 and 9.5.2

Section 9.1 requires each permit to include emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance. This template does not address compliance and monitoring for vapor collection and control systems other than systems which return vapors to product storage tanks. Condition #21 prohibits the use of other systems which are not addressed in this template. To assure compliance with leak and delivery vessel pressure requirements, condition #22 prohibits loading of a delivery vessel if its pressure relief valve opens and requires corrective action should this condition occur.

Section 9.4.2 requires that periodic monitoring be performed if none is associated with a given emission limit to assure compliance. Section 5.3 of District Rule 4624 requires pressure of the vapor collection and control system not to exceed certain limits for water column pressure and vacuum. The District rule does not specify a test method or frequency for this work practice standard, which is in support of the most stringent emissions requirement, as demonstrated through streamlining in accordance with White Paper Number 2. Therefore, a condition has been added which contains a monitoring frequency and test method for pressure requirements (see condition #19). These requirements are identical to those used in SJV-LR-1-0.

Section 5.4 of District Rule 4624 requires that the loading and vapor collection equipment be maintained so there are no leaks and no excess organic liquid drainage at disconnect. The rule does not specify a monitoring frequency (for leaks and drainage) or test method (for drainage) to assure compliance. Therefore, template conditions have been added which contain monitoring frequencies and test methods (see conditions #13-15).

Section 9.5.2 requires all records be maintained for at least five years. Template permit condition #2 require that all records be maintained for at least five years.

# <u>District Rules 4621 and 4624 (formerly 463.3) and County Rules 412 (Fresno and Kings)</u>

District Rule 4624, for has been submitted to the EPA to replace each of the county rules in the SIP: Rules 412 (Fresno and Kings). These rules and District Rule 4621 contain requirements establishing volatile organic compound (VOC) emission limits and work practice standards for organic liquid (which may include gasoline) and gasoline loading facilities, gasoline delivery vessels, general facility requirements regarding transfer to and storage of gasoline in stationary storage tanks. The mass emission limits of these rules apply to Class 1 Loading Facilities which load 20,000 gallons or more on any one day, as defined in District Rule 4624. Class 1 Loading Facilities are prohibited from using this template, pursuant to the Template Qualification Form (TQF). A condition limiting the volume loaded to less than 20,000 gallons per day of organic fluid is included in this template. These rules also contain emission limits, expressed as control efficiency and work practice standards. These control efficiency requirements and work practice standards are applicable to Class 2 Organic Liquid Loading Facilities loading 4000 gallons or more but less than 20,000 gallons on any one day, for which this template was designed.

The following analysis shows the VOC emission limit of District Rule 4624 is more stringent than those of the referenced county rules and District Rule 4621. Streamlining procedures, in accordance with White Paper Number 2 and as documented in the following steps, are utilized to substitute the proposed set of standards for the otherwise applicable standards.

# **Step 1. Side-by-side Comparison of Applicable Requirements:**

			VOC		
CITATION:	District Rule 4624	Fresno County Rule 412	District Rule 4621	Kings County Rules 412	Proposed Requirements
WORK PRACTICE STANDARDS IN SUPPORT OF EMISSION LIMIT (E.L.)	•Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [4624, 5.2]     •Delivery tanks which previously contained organic liquids with a TVP greater than 1.5 psia at loading conditions shall be filled only at loading facilities satisfying Section 5.1 and 5.2 [4624, 5.3]	• None	•Vapor recovery system shall not cause the pressure in the gasoline delivery vessel to exceed 18 inches H <sub>2</sub> O or 6 inches H <sub>2</sub> O vacuum. [4621, 5.3.4]	• None	•Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [4624, 5.2 and 4621, 5.3.4]  •Delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at loading facilities satisfying Section 5.1 and 5.2 [4624, 5.3, 4621, 5.2.2, and 412(4)(a)]
EMISSION LIMIT	•Loading unit shall be equipped with a system to prevent the release to atmosphere of at least 95% by weight of VOCs displaced during loading. [4624, 5.1.2]	•Loading unit shall consist of a system which 1) has 90% efficiency or 2) directs vapors to fuel gas system. [412(C)(1)]	Any gasoline delivery vessel into which gasoline vapors have been transferred shall be filled only at a facility with system preventing at least 95% of vapors displaced from entering atmosphere. [4621, 5.2.2]	•Any gasoline delivery vessel into which gasoline vapors have been transferred shall be filled only at a facility with system preventing at least 95% of vapors displaced from entering atmosphere.  [412(4)(a)]	Loading unit shall be equipped with a system to prevent the release to atmosphere of at least 95% by weight of VOCs displaced during loading. [4624, 5.1.2]

WORK PRACTICE STANDARD NOT SUPPORTING E.L.	Loading and vapor collection equipment maintained such that there are no liquid leaks in excess of 3 drops/min or vapor leaks in excess of 10,000 ppm. [4624, 5.4]     Loading device maintained to prevent liquid drainage in excess of 10 ml per average of 3 consecutive disconnects. [4624, 5.4]     Construction, reconstruction, or expansion of any top loading facility shall not be allowed. [4624, 5.5]	No liquid drainage in excess of 10 mls per disconnect for bottom loading or 2 mls per disconnect for top loading, per average of 3 consecutive disconnects.  [412(C)(4)] No vapor leaks in excess of 22,000 ppm.  [412(C)(4)]	No gasoline delivery vessel operated or loaded unless vessel is vapor tight. [4621, 5.2.2] No gasoline delivery vessel shall be operated or loaded unless valid State of California decals, as required by section 41962 of the Health and Safety Code are displayed on the cargo tank. [4621, 5.2.1] The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system. [4621, 5.1.1] No gasoline shall be placed in any above-ground tank of 250 gallon capacity or more unless it is equipped with pressure-vacuum valve. [4621, 5.1.2] No gasoline shall be placed in any above-ground tank of 250 gallon capacity or more unless it is equipped with pressure-vacuum valve. [4621, 5.1.2] Gasoline vapors shall not be purged into the atmosphere. [4621, 5.3.3]		<ul> <li>Loading device shall have no excess organic liquid drainage at disconnections in excess of 10 mls per disconnect for bottom loading or 2 mls per disconnect for top loading, per average of 3 consecutive disconnects. [4624, 5.4 &amp; 412(C)(4)]</li> <li>Loading and vapor collection equipment shall be designed and operated such that there are no leaks. (leaks as defined in condition). [4624, 5.4 and 412(C)(4)]</li> <li>No gasoline delivery vessel operated or loaded unless vessel is vapor tight. [4621, 5.2.2]</li> <li>No gasoline delivery vessel shall be operated or loaded unless valid State of California decals, as required by section 41962 of the Health and Safety Code are displayed on the cargo tank. [4621, 5.2.1]</li> <li>Construction, reconstruction, or expansion of any top loading facility shall not be allowed. [4624, 5.5]</li> <li>The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system. [4621, 5.1.1]</li> <li>No gasoline shall be placed in any above-ground tank of 250 gallon capacity or more unless it is equipped with pressure-vacuum valve. [4621, 5.1.2]</li> <li>Gasoline vapors shall not be purged into the atmosphere. [4621, 5.3.3]</li> </ul>
MONITORING	•None	•None	•None	•None	Perform annual VOC emission test. [2520, 9.4.2] Perform annual vapor collection and control system pressure tests. [2520, 9.4.2] Perform quarterly leak inspections. Change to semiannual inspections under certain conditions. [2520, 9.4.2] Perform quarterly drainage inspections. Change to annual inspections under certain conditions. [2520, 9.4.2]
RECORDKEEPING	Maintain all records for a period of not less than two years. [4624, 6.1]	•None	∙None	•None	Maintain all records for a period of not less than five years. [2520, 9.5.2]
REPORTING	•None	•None	•None	•None	•None

TEST METHODS	Leak detection with portable hydrocarbon detection instrument calibrated with methane (i.e. similar to EPA Method 21)     Halogenated exempt compounds by ARB Method 432. [4624, 6.2.1]     VOC emissions by using 40CFR§60.503 and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [4624, 6.2.2]	Vapor and Liquid leak detection using CARB test procedure with gas detector [412(C)(4)]	Gasoline Tank Truck vapor tightness verified by EPA Method 27. [4621, 6.2.3]     Gasoline Vapor recovery compliance using ARB Method 202. [4621, 6.2.1]	•None	Leak detection by EPA Method 21. [§60.503(b)]     Halogenated exempt compounds by ARB Method 432. [4624, 6.2.1]     VOC emissions by using 40CFR§60.503 and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [4624, 6.2.2]     Gasoline Tank Truck vapor tightness verified by EPA Method 27. [4621, 6.2.3]
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#### Step 2. Select most stringent emission limit and/or work practice standard:

#### **VOC Emission Limits**

Emission limits in District Rule 4624 and Fresno County Rule 412 are expressed as control efficiency requirements. The proposed limit of 95% control efficiency for organic liquid VOCs is the same as District Rule 4624 and more stringent than the Fresno County requirement of 90% efficiency.

District Rule 4621 and Kings County Rule 412 require any delivery vessel which previously contained gasoline vapors to be filled only at a loading facility equipped with a system that has 95% collection and control. The proposed limit is as stringent since organic liquids include gasoline, pursuant to the definition in rule 4624. Compliance with this requirement is assured when delivery tanks containing gasoline vapors are loaded by any unit using this template. However the template conditions do contain this general source requirement to prevent loading of any such tank using other racks which do not meet these requirements as specified in the condition. This requirement for gasoline delivery vessels has been combined with the similar work practice standard for organic liquid delivery vessels from District Rule 4624, section 5.3. The following calculation demonstrates that the emission limit for Class 1 loading facilities (0.08 lb VOC/1000 gallons loaded) is more stringent than 95% control efficiency for gasoline loading in this case:

$$LL = 12.46 \left( \frac{SPM}{T} \right) \left( 1 - \frac{eff}{100} \right)$$

#### where:

L<sub>L</sub> = Loading losses from tank truck, pounds per 1000 gallons loaded (AP-42, 5.2, equation (1)

S = 1.0, saturation factor for dedicated vapor balance service (i.e. gasoline vapors transferred into tank during unloading) from AP-42 table 5.2-1

P = 2.3, true vapor pressure of gasoline, worst case from AP-42, Table 7.1-2 and using Reid vapor pressure of 7 psia (from AP-42, 5.2), as worst case for gasoline at 40°F

M = 68 = molecular weight of gasoline vapors, from AP-42 table 7.1-2

 $T = 40^{\circ}F = 500^{\circ}R$ , worst case temperature of fluid during loading conditions

eff = 95%, overall reduction efficiency

Minimizing the numerator in SPM/T and maximizing the denominator will result in the worst case values (i.e. lowest emissions) for variables in the above equation. This will occur with the lowest saturation factor and lowest temperature loading temperature expected which results in the lowest true vapor pressure expected  $^{12}$ . Loading losses for gasoline collection and control systems with 95% efficiency are calculated to be 0.195 lb VOC/1000 gallons loaded. AP-42 states this equation is approximate with a probable error of  $\pm$  30%. Assuming this calculation is 30% high, at best, emissions are not expected to be less than 0.14 lb VOC/1000 gallons with 95% control. This value is

<sup>12</sup> Higher temperatures require a higher TVP to be used in the equation. The combination of lowest loading temperature and associated TVP at this temperature does result in the lowest factor for use in this equation. See AP-42, Table 7.1-2.

approximately 2 times greater than that allowed by the proposed requirement for Class 1 facilities of 0.08 lb VOC/1000 gallons loaded. Therefore, the proposed requirement is more stringent and assures compliance with this gasoline loading work practice standard.

#### Work Practice Standards Not Supporting An Emissions Limit

The proposed work practice standards not in support of an emission limit consist of the following:

- 1. Loading device shall have no excess organic liquid drainage at disconnections in excess of 10 mls per disconnect for bottom loading nor 2 mls per disconnect for top loading, per average of 3 consecutive disconnects.
- 2. Loading and vapor collection shall be designed and operated such that there are no leaks.
- 3. No gasoline delivery vessel shall be used or operated unless it is vapor tight.
- 4. No gasoline delivery vessel shall be operated or loaded unless valid State of California decal is displayed on the cargo tank.
- 5. Construction, reconstruction, or expansion of any top loading facility shall not be allowed.
- 6. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system.
- 7. No gasoline shall be placed in any above-ground tank of 250 gallon capacity or more unless it is equipped with pressure-vacuum valve.
- 8. Gasoline vapors shall not be purged into the atmosphere.

These proposed work practice standards are more stringent or as stringent than those of District Rules 4621 and 4624 and the county rules as demonstrated below.

District Rule 4624: The proposed requirements contain the identical work practice standards, not supporting an emission limit, as District Rule 4624.

In addition, the proposed template conditions require no organic liquid drainage at disconnections in excess 2 mls per disconnect for top loading facilities and loading only into tanks with valid state decals, which are not addressed by District Rule 4624. Therefore the proposed standards are more stringent than District Rule 4624.

District Rule 4621: The work practice standards of Rule 4621 address requirements for gasoline delivery vessels, transfer of gasoline into stationary storage tanks, and general gasoline bulk plant requirements. The proposed requirements contain these identical work practice standards. In addition the proposed template conditions contain vapor leak standards which are not addressed by District Rule 4621. Therefore the proposed standards are more stringent than District Rule 4621.

County Rules 412 (Fresno and Kings): Fresno County Rule 412 contains standards for vapor leak and excess organic liquid drainage at disconnect. Kings County Rule 412 contains no standards. As indicated in Step 1, Side-by-Side Comparison, the following observations are apparent:

- 1) The proposed standard requiring no leaks in the loading and vapor collection system (vapor detected in excess of 10,000 ppm and liquid in excess of 3 drops/minute) is more stringent than those standards required by both county rules.
- 2) The proposed standard regarding excess organic liquid drainage at disconnections is as stringent as Fresno County and more stringent than Kings County.

#### Step 3. Conditions ensuring compliance with applicable requirements.

Template condition #3 requires units using this template be equipped with a system to control 95% of VOC displaced during loading of delivery vessels. In addition, conditions are included to meet work practice standards in support of the emission limit (conditions #4, and #7) and work practice standards not in support of an emission limit (conditions #5, #6, #8, and #10-12). Conditions #5, #6, #10, and #11 are general source requirements concerning transfer and storage of gasoline in stationary storage containers, purging gasoline vapors, and construction or modification. Condition #8 requires gasoline delivery vessels be vapor tight and that gasoline not be loaded into delivery vessels unless valid state decals are displayed, assuring the vapor integrity of the gasoline delivery tank 13. Condition #12 contains work practice standards pertaining to liquid and vapor leaks, and excess drainage. Compliance with all required testing, monitoring and recordkeeping requirements is assured by conditions #9, #13–20.

9

<sup>&</sup>lt;sup>13</sup> Section 41962 of the California Health and Safety Code gives authority to CARB to establish performance standards and test procedures to be performed annually for gasoline cargo tanks. The California Code of Regulations, Title 17, subchapter 8, Article 1, section 94004, Certification of Vapor Recovery Systems - Gasoline Cargo Tanks, refers to the CARB's "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Cargo Tanks". This CARB publication contains the applicable test procedures and performance standards, which must be performed/passed to receive a valid state decal assuring gasoline cargo tank integrity (specifically CP-204, TP-204.1, TP-204.2).

#### Step 4. Certify compliance

By using this template as part of the title V application, the applicant is certifying compliance with all conditions required as part of the template.

#### Step 5. Compliance schedule for new monitoring requirements

Not applicable.

#### Step 6. Request for permit shield

By using this template the applicant is requesting a permit shield from the requirements of District Rules 4621, excluding section 5.2 for railroad car delivery vessels only, 4624 and County Rule 412 (Fresno and Kings). See template conditions #23 and #24.

#### V. Permit Shield

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Title V permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

#### County Rules 108, 108.1, and 110

By using this template the applicant is requesting a permit shield from requirements of County Rules 108, 108.1, and 110 in template permit condition #23.

#### **County Rules 412, 413, and 419**

A permit shield will also be granted for County Rules 412 (Merced, San Joaquin, and Stanislaus), 413 (Kern and Tulare), and 419 (Madera). Facilities qualifying to use this template are limited to those with a daily throughput less than 20,000 gallons per day. These county rules are applicable to facilities with throughputs greater than or equal to 20,000 gallons per day and are therefore not applicable to units qualifying to use this template. A permit shield is granted from these requirements in template permit condition #23.

#### **District Rule 4661**

District Rule 4661 establishes limits on VOC emissions associated with the use of organic solvents. Pursuant to section 4.2 of this rule, any facility that is subject to and in compliance with a source specific prohibitory Rule in District Regulation IV, is exempt from Rule 4661. Units qualifying to use this template are limited to those which are in full compliance with the provisions of District Prohibitory Rule 4624, and are therefore

exempt from Rule 4661. A permit shield is granted from these requirements in template permit condition #25.

#### 40CFR60, Subpart XX

A permit shield will also be granted for 40CFR60, Subpart XX because facilities qualifying to use this template are limited to those with a daily throughput less than 20,000 gallons (75,700 liters) per day. By definition these are not NSPS affected facilities, that is, gasoline bulk terminals (see Appendix A). A permit shield is granted from these requirements in template permit condition #25.

#### 40CFR63, Subpart R

A permit shield will also be granted for 40CFR63, Subpart R because facilities qualifying to use this template are limited to those with a daily throughput less than 20,000 gallons (75,700 liters) per day. By definition these are not affected facilities, that is, gasoline bulk terminals (see Appendix A). A permit shield is granted from these requirements in template permit condition #25.

#### VI. Permit Conditions

The following conditions will be incorporated into the Title V permit of any facility choosing to make use of template SJV-LR-2-0:

- 1. Operator shall ensure all required source testing conforms to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)]
- 2. Operator shall maintain all records of required monitoring data and support information for inspection for a period of five years. [District Rule 2520, 9.5.2]
- 3. This unit shall be equipped with a system to prevent the release to atmosphere of at least 95% by weight of the VOCs displaced during the loading of delivery vessels. [District Rule 4624, 5.1.2 and Fresno County Rule 412(C)(1)]
- 4. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. This requirement shall not apply to the loading of liquid petroleum gas. [District Rules 4621, 5.3.4 and 4624, 5.2]
- 5. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1]

- 6. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2]
- 7. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4621, 5.2.2 and 4624, 5.3; and Kings County Rule 412, 4(a)]
- 8. No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004]
- 9. Loading throughput of organic liquid, with a TVP of 1.5 psia or greater shall not exceed 20,000 gallons on any one day at this loading facility. Monitoring records of daily throughput shall be maintained to demonstrate compliance. [District Rules 4624, 3.3 and 2520, 9.4.2]
- 10. Gasoline vapors shall not be purged into the atmosphere. [District Rule 4621, 5.3.3]
- 11. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5]
- 12. Loading and vapor collection equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls for bottom loading or 2 mls for top loading, per average of 3 consecutive disconnects. [District Rule 4624, 5.4, 3.6 and Fresno County Rule 412]
- 13. During the loading of delivery vehicles, operator shall perform and record the results of quarterly leak inspections of the loading and vapor collection equipment at each loading arm. If none of the components are found to be leaking during five consecutive quarterly inspections, the leak inspection frequency may be changed from

quarterly to semiannual. However, if one or more of the components are found to leak during a semiannual inspection, the inspection frequency shall change back to quarterly. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be measured at a distance of one centimeter from the potential source. [District Rule 2520, 9.4.2]

- 14. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of quarterly drainage inspections at disconnect for each loading arm. If no excess drainage is found during five consecutive quarterly inspections, the drainage inspection frequency may be changed from quarterly to annual. However, if one or more excess drainage condition is found during an annual inspection, the inspection frequency shall change back to quarterly. [District Rule 2520, 9.4.2]
- 15. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2]
- 16. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (including date each leak or excess drainage condition repaired), and E) inspector name and signature. [District Rule 2520, 9.4.2]
- 17. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.1 and County Rules 412 (Fresno, Kings, Stanislaus, Merced, and San Joaquin), 413 (Kern and Tulare), and 419 (Merced)]
- 18. VOC emissions shall be determined annually using 40CFR§60.503 "Test Methods and Procedures," and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2]
- 19. The vapor collection and control system (VCCS) shall be tested annually to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of ±2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. Every loading position must be tested at least once during the annual performance test. [District Rule 2520, 9.4.2]
- 20. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3]

- 21. The vapor collection and control system shall consist of a device which returns collected vapors to a product storage tank only. The system shall not include a device which incinerates, adsorbs or otherwise treats collected vapors. [District Rule 2520, 9.1]
- 22. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1]
- 23. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), and 412 (Fresno and Kings). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: District Rules 4621(as amended May 20, 1993), excluding section 5.2 for railroad car gasoline delivery vessels only, and 4624 (as amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 25. The requirements of SJVUAPCD Rules 4661 (as amended December 17, 1992); County Rules 412 (Stanislaus, Merced, and San Joaquin), 413 (Kern and Tulare), and 419 (Merced); and 40CFR Part 60, Subpart XX and 40CFR Part 63, Subpart R do not apply to this permit unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

# APPENDIX A

# DEFINITIONS FOR TEMPLATE # SJV-LR-2-0

#### 40CFR§60.501 Definitions

<u>Bulk gasoline terminal</u>: any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law and discoverable by the Administrator and any other person. [48 FR 37590, Aug. 18, 1983]

<u>Gasoline</u>: any petroleum distillate or petroleum/distillate alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion. [48 FR 37590, Aug. 18, 1983]

#### SJVUAPCD RULE 4624 ORGANIC LIQUID LOADING

Gasoline bulk plant: any loading facility and associated unloading facilities, storage tanks, and vapor recovery system(s) used to load less than 20,000 gallons in any one (1) day of gasoline to delivery vessels (i.e. tanks trucks or trailers). [District Rule 4621, 3.3]

Organic liquid: any liquid which contains VOCs and has a TVP greater than 1.5 psia at actual loading conditions. [District Rule 4621, 3.3]

# **APPENDIX B**

# COUNTY RULE / DISTRICT RULE 1081 COMPARISON FOR TEMPLATE # SJV-LR-2-0

# **APPENDIX B**

# Rule 1081 (Source Sampling)

	1081 SJVUAPCD	108 KINGS	110 MADERA	108.1 FRESNO	108.1 MERCED	108.1 S.J.	108.1 TULARE	108.1 KERN	108.1 STANI SLAUS
REQUIREMENTS									
Upon request of the APCO, the source shall provide info. and records to enable the APCO to determine when a representative sample can be taken.	X		X	X	X	X	X	X	X
The facility shall collect, have collected or allow the APCO to collect, a source sample	Χ	X	X	X	X	X	X	X	Χ
The source shall have District personnel present at a source test	X								
The applicable test method, if not specified in the rule, shall be conducted in accordance with 40 CFR § 60, Appendix A	X								
Test procedures: 1) arithmetic mean of three runs 2) a scheduled source test may not be discontinued solely due to the failure to meet the applicable standard(s), and 3) arithmetic mean of two runs is acceptable if circumstances beyond owner or operator control occurs.	X								

# **APPENDIX C**

# EPA COMMENTS / DISTRICT RESPONSE FOR TEMPLATE # SJV-LR-2-0

### **EPA COMMENTS / DISTRICT RESPONSE**

The EPA's comments regarding loading rack template SJV-LR-2-0 are encapsulated below followed by the District's response. A copy of the EPA's 5/8/97 letter is available at the District. This template is designed for loading racks at facilities loading 4,000 or more, but less than 20,000 gallons of organic liquid, including gasoline, into tank trucks, trailers, or railroad tank cars on any one day.

#### **General Comments:**

#### 1. EPA COMMENT

The District should adopt a consistent approach in providing more complete information on the origin and authority of each qualification criterion to include both the Rule number(s) and the pertinent section(s).

#### DISTRICT RESPONSE

The District agrees more specific citations will help sources identify the exact section in the rules where particular qualification requirements are discussed or terms defined. The District will add specific citations to the qualification questions in this template, including the pertinent section(s) of the rule as we have done in other templates.

#### 2. EPA COMMENT

As noted in our comments on previously submitted templates, the certification language on the Template Qualification Form is incomplete and must be made consistent with part 70 requirements.

#### DISTRICT RESPONSE

The compliance certification language in the Template Qualification Form has been amended to be consistent with part 70 requirements.

### **Template Specific Comments:**

#### 3. EPA COMMENT

The streamlining demonstration must address emission limits expressed as a collection efficiency.

#### DISTRICT RESPONSE

The District has moved the collection efficiency requirements being addressed from the work practice standards category to the emission limit category in the streamlining demonstration.

#### 4. EPA COMMENT

Regarding the permit shields, the District has shielded the entire "source" from certain requirements. As we noted in our previous comments, the permit shield may only apply to the individual unit subject to the template unless the permit contains all necessary conditions to ensure that a source shielded cannot later trigger these requirements.

#### **DISTRICT RESPONSE**

The applicability of the permit shields has been restricted to apply to the permit unit and not to the entire source. Permit conditions have been added as necessary to ensure that a source shielded from cannot later trigger these requirements

#### 5. EPA COMMENT

Section 5.1 of District Rule 4621 contains general source requirements regarding gasoline storage tanks which could apply to sources subject to this template. Therefore the District must add conditions for gasoline storage tanks to address the requirements of section 5.1.

#### **DISTRICT RESPONSE**

The District agrees section 5.1 requirements could apply generally to a source qualifying to use this template. Conditions have been added to the template to address the requirements of District Rule 4621, section 5.1, as follows:

- The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1]
- No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2]

#### 6. EPA COMMENT

The District must add the general source operating restriction for delivery vessels pursuant to District Rule 4621, section 5.2. The template does not restrict the source from loading the delivery vessel at another loading rack not subject to the template. In addition the permit must require that no delivery vessel will be operated or used unless it is vapor tight. While the state requires an annual test, sources are also subject to this on-going requirement.

#### DISTRICT RESPONSE

The following conditions have been amended as follows to include the general source operating restrictions for delivery vessels, including the vapor tightness requirement, pursuant to District Rule 4621, section 5.2:

- All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4621, 5.2.2 and 4624, 5.3, and Kings County Rule 412, 4(a)]
- No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004]

#### 7. EPA COMMENT

Regarding the shield for District Rule 4622, Transfer of Gasoline into Vehicle Fuel Tanks, the permit must either contain a prohibition on operating in a manner that would be subject to rule 4622 or remove the permit shield for this regulation.

#### **DISTRICT RESPONSE**

The District feels it is obvious that loading racks were not constructed in a manner which would allow them to transfer gasoline directly into vehicle fuel tanks. In addition, units that transfer gasoline into vehicle fuel tanks are prohibited from using this template. The District will not put such a prohibition requirement on the template. We have removed the permit shield from requirements of District Rule 4622 from this permit.

#### 8. EPA COMMENT

Regarding the shield for District Rule 4624, section 5.5, Organic Liquid Loading, the permit shields sources from the prohibition against installing new top loading facilities or expanding existing top loading facilities. This requirement must be added or the shield removed.

#### DISTRICT RESPONSE

This prohibition from District Rule 4624, section 5.5, has been added to the template conditions as follows:

Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5].

#### 9. EPA COMMENT

Concerning monitoring conditions, we recommend requiring the monthly leak check also include a determination as to whether the source has met the excess drainage limit condition. We also suggest revising condition #6 to require that sources demonstrate that alternate pressure measure devices are equivalent, as follows: "Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other equivalent instrument that is demonstrated to be equivalent..."

#### **DISTRICT RESPONSE**

Monitoring frequency is not specified in any District Rules addressed by this template for leaks or excess drainage. Although the District originally proposed monthly leak testing in this template, after further consideration and affected source cite inspections, we believe that quarterly inspections for leaks and drainage are adequate to assure compliance. NSPS, subpart XX requires monthly leak inspections for affected facilities loading greater than 20,000 gallons/day. Since facilities being addressed in this template may not load more than 20,000 gallons/day, and are not subject to NSPS, we believe the quarterly monitoring is justified. In subsequent phone conferences with EPA, the District proposed quarterly inspections for leaks and excess drainage, and allowing the source after 5 consecutive negative leak or drainage inspections, to change the frequency to annual. These drainage requirements are similar to those used for leaks in earlier approved oil field tank and fugitive leak templates (SJV-TK-1 through 18 and SJV-FG-1, respectively). EPA stated they would not approve this template without the following more stringent leak detection frequency which has been incorporated into the template along with the District proposed drainage inspection frequency and method:

- During the loading of delivery vehicles, operator shall perform and record the results of quarterly leak inspections of the loading and vapor collection equipment at each loading arm. If none of the components are found to be leaking during five consecutive quarterly inspections, the leak inspection frequency may be changed from quarterly to semiannual. However, if one or more of the components are found to leak during a semiannual inspection, the inspection frequency shall change back to quarterly. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be measured at a distance of one centimeter from the potential source. [District Rule 2520, 9.4.2]
- Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform

and record the results of quarterly drainage inspections at disconnect for each loading arm. If no excess drainage is found during five consecutive quarterly inspections, the drainage inspection frequency may be changed from quarterly to annual. However, if one or more excess drainage condition is found during an annual inspection, the inspection frequency shall be changed from annual to quarterly. [District Rule 2520, 9.4.2]

- Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2]

Condition #6 (now condition #18) has been revised pursuant to EPA's recommendation.

#### 10. EPA COMMENT

We recommend correcting a typographical error in condition #7, as follows: "detection of organic compounds in excess of 10,000 ppm as methane...."

#### **DISTRICT RESPONSE**

The District has corrected this typographical error as suggested to clarify the meaning of this condition. Please note however that condition #7 is now #12.

#### 11. EPA COMMENT

The gasoline distribution facility Maximum Control Technology (MACT) standard (40 CFR 63, subpart R) and the refinery MACT (40 CFR 63, subpart CC apply to this source category. We recommend adding these requirements to the "Applicable Requirements" table as category B requirements..

#### DISTRICT RESPONSE

The District agrees MACT standard, subpart CC for refineries may be applicable to sources qualifying to use this template. The refinery MACT has been added as a category B requirement in the Applicable Requirements table in section III. Category B requirements contain federally enforceable requirements that were not addressed in the template. Requirements from these rules must be addressed by the applicant outside of the template.

The District does not agree that the gasoline distribution facility MACT, subpart R, applies to any facility qualifying to use this template. A permit shield has been granted for 40CFR63, Subpart R, because facilities qualifying to use this template are limited to those with a daily throughput less than 20,000 gallons (75,700 liters) per day. By definition these are not affected facilities, that is, gasoline bulk terminals (see Appendix A).

#### 12. EPA COMMENT

The District should delete the word "gasoline" in reference to tank trucks, trailers, or railroad tank cars on the Cover Page.

#### **DISTRICT RESPONSE**

The District has replaced the word "gasoline" with "organic liquid" on the Cover Page, since this template applies to the loading of organic liquid and not just gasoline.

#### 13. EPA COMMENT

The citation in the seventh row of Category "A" rules in Table 1 of Section III, Applicable Requirements contains an error. Permit shields are discussed in section 13.2 of District Rule 2520, not 9.13.2.

#### DISTRICT RESPONSE

The citation referenced has been corrected to read "2520, 9.4.2, 9.5.2, 13.2".

#### 14. EPA COMMENT

The last sentence in the paragraph in Section IV, Compliance, discussing compliance with District Rule 2520, sections 9.4.2 and 9.5.2 reads: "Therefore, the proposed monitoring, recordkeeping, and reporting requirements in condition #5 are identical to 40 CFR 60.503(d), concerning testing to demonstrate pressure requirements." However, condition #5 in the template refers only to the requirement to maintain certain pressure levels in the delivery tank, pursuant to District Rule 4624, section 5.2..

#### **DISTRICT RESPONSE**

This typographical error has been corrected. In the template version you refer to, the reference should have been the "requirements in condition #6". The current reference is condition #19, after adding additional requirements and reorganizing the conditions to a more logical sequence.

#### 15. EPA COMMENT

The first sentence in the paragraph in Section IV, discussing compliance with District Rule 4621, section 5.2, and 4624 and County Rule 412 (Fresno and Kings) states District Rule 4624 has been submitted to EPA to replace SIP Rules 412 for Fresno and Kings Counties. The EPA Rulemaking Office records show no evidence that Rule 4624 has been submitted.

#### DISTRICT RESPONSE

District Rule 4624 was formerly District Rule 463.3, which has been submitted to EPA for SIP approval. The District was in contact with Mae Wang of EPA Rulemaking on March 3, 1997, to review proof that this rule was submitted to EPA for SIP approval. The District suggests you contact Ms. Wang to confirm the submittal status.

#### 16. EPA COMMENT

In the side-by-side comparison of Applicable Requirements Table in the streamlining demonstration, the citation for the fourth bullet in the Work Practice Standard not Supporting Emission Limit - District Rule 4624 cell should be 4624, section 5.4, not section 5.3.

#### DISTRICT RESPONSE

This typographical error has been corrected to cite District Rule 4624, section 5.3.

#### 17. EPA COMMENT

The second bullet in the Work Practice Standard not Supporting Emission Limit in the side-by-side comparison table, the Fresno County Rule 412 cell should be corrected as follows: "No liquid drainage in excess of 10 mls per disconnect for bottom loading nor or 2 mls per disconnect for top loading..."

#### DISTRICT RESPONSE

This typographical error has been corrected as recommended to be consistent with the language of Fresno County Rule 412..

#### 18. EPA COMMENT

The District may wish to specify the pertinent section of Fresno County Rule 412 in the citation for the third bullet in the Work Practice Standard not Supporting Emission Limit - Proposed Requirements cell.

#### **DISTRICT RESPONSE**

To be consistent with other bullets in this streamlining section, this bullet has been amended to include the pertinent section cite from Fresno County Rule 412.

#### 19. EPA COMMENT

The District should reconsider whether a delivery vessel vapor tightness requirement should be omitted from the Work Practice Standard not Supporting Emission Limit - Proposed Requirements cell. Accordingly if a requirement for delivery vessel vapor tightness is needed, periodic monitoring and test method to ensure compliance must be specified.

#### DISTRICT RESPONSE

The requirement for vapor tightness applies to gasoline delivery vessels only from District Rule 4621. The following condition has been amended as follows to include the vapor tightness requirement, pursuant to District Rule 4621:

- No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004]

Also, in subsequent conversations with both EPA and CARB concerning tank tightness tests in the streamlining demonstration, it was discovered the CARB test methods used for tank tightness (TP 204.1 and 204.2) have not been approved by EPA and therefore

cannot be substituted for EPA Method 27, which is specified in District Rule 4621. EPA White Paper 2, Attachment A states that only EPA approved methods may be used in streamlining as an alternative test method to show compliance with emission limits. The District has therefore added the following requirement, pursuant to District Rule 4621:

- The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3]

#### 20. EPA COMMENT

In Step 2 of the streamlining demonstration, the replacement of the District Rule 4621 gasoline delivery vessel vapor tightness requirement with a more stringent Health and Safety Code requirement is discussed. The District will need to re-evaluate the purpose and/or applicability of the template. It is EPA's understanding this template is designed for the loading of organic liquid (including gasoline) into delivery vessels (including tank trucks, trailer, or railroad tank cars), not just the loading of gasoline into gasoline delivery vessels.

The template needs to ensure the vapor tight requirement for delivery vessels is met not only for gasoline cargo tanks, but for other organic cargo tanks as well. In addition it is unclear whether the state cargo tank certification extends to railroad tank cars.

Finally, the District must provide documentation, as required by Step 2 in the streamlining process in White Paper #2, to justify the District's determination that the Health & Safety (H&S) Code requirements regarding cargo tank testing is more stringent than District Rule 4621. The H&S Code, itself, does not specify the performance standards or the test methods used by CARB to determine vapor tightness of cargo tanks. The District must resolve these streamlining issues before issuing the template.

#### **DISTRICT RESPONSE**

The vapor tight requirement applies only to gasoline delivery vessels and not to other organic liquid delivery vessels, pursuant to District Rule 4621. Concerning the vapor tightness requirement for gasoline railroad tank cars, the state certification program does not apply to this specific type of tank. There are no known facilities currently transporting gasoline by railroad tank car, however some may wish to reserve that option. Therefore the District has chosen not to address compliance with section 5.2 (vapor tightness) for railroad tank cars. Compliance for any railroad tank cars must be demonstrated by the source outside of this template. If only tank trucks and trailers are used for delivery, the source must propose a condition on their source specific Title V application stating such. The District has modified Table 1 in Section III, Applicable Requirements and the permit shield for District Rule 4621 accordingly.

Regarding gasoline delivery tank tightness testing/monitoring and documentation of test methods used in the streamlining process, please refer to District Response to EPA Comment #19.

#### 21. EPA COMMENT

In template section V, Permit Shield, the applicability of District Rules 4621 and 4624 is confusing. It is our understanding that the template addresses the requirement for organic liquid loading racks. However the third paragraph of the section addressing applicability of District Rule 4621 reads, "...This template does address requirements for gasoline bulk plants..." We recommend the District provide clearer language to explain why a permit shield should be granted for Rule 4621, excluding only section 5.2.

#### DISTRICT RESPONSE

This template is intended to address applicable requirements for organic liquid loading facilities, including gasoline loading facilities, which load less than 20,000 gallons in any one (1) day. District Rule 4624 contains requirements establishing volatile organic compound (VOC) emission limits and work practice standards for organic liquid loading (which may include gasoline). District Rule 4621 contains requirements specifically for gasoline loading facilities, gasoline delivery vessels, and general facility requirements regarding transfer to and storage of gasoline in stationary storage tanks. Originally, only section 5.2 of District Rule 4621 was considered applicable to facilities qualifying to use this template, since Gasoline Bulk Plants, as defined in District Rules 4621 and 4624 as any facility loading less than 20,000 gallons/any one day, are exempt from the requirements of District Rule 4624 if they are subject to District Rule 4621 (reverse logic). However, the requirements from District Rules 4621 and 4624 are similar for gasoline bulk plants. Therefore template section III, Applicable Requirements has been revised to include District Rule 4621 (except section 5.2 for railroad tank cars) and the streamlining demonstration has been modified accordingly. Conditions specific to gasoline loading facilities from District Rule 4621 are identified as such in the template.

Sections V, Permit Shield, and Section IV, Compliance have been modified to help clarify any confusion in applicability of these rules.

### **Comments on Specific Template Conditions:**

#### 22. EPA COMMENT

When a District Rule is referenced within a permit condition, the adoption and/or amendment date of the Rule should be included. Condition 1 should be revised.

#### DISTRICT RESPONSE

Condition #1 has been revised as suggested to be consistent with other District templates.

#### 23. EPA COMMENT

The District should clarify in condition 3 whether the California H&S Code decal requirement applies only to gasoline delivery vessels. If this is the case, it may be

necessary to add a vapor tightness requirement in the template, along with periodic monitoring, for non-gasoline delivery vessels..

#### DISTRICT RESPONSE

As discussed in previous District Responses, the vapor tight requirement applies only to gasoline delivery vessels and not to other organic liquid delivery vessels, pursuant to District Rule 4621. Since no such requirement exists for other organic liquid delivery vessels, only gasoline delivery vessels were specified in the referenced condition. Please also see the District Responses to EPA Comments #19 and #20.

#### 24. EPA COMMENT

The citation of 40 CFR 60.503(d) should be deleted form condition 6 since this regulation is not applicable to facilities qualifying to use this template.

#### DISTRICT RESPONSE

This citation as the source of authority for this requirement has been deleted.

#### 25. EPA COMMENT

The last sentence in condition 7 should read: "Excess liquid drainage shall be defined as exceeding 10 mls for bottom loading nor or 2 mls for top loading...." Also, the citation of District Rule 2520, 9.4.2 for the source of origin and authority for this requirement should be replaced by District Rule 4624. 5.4.

#### DISTRICT RESPONSE

The language in this condition (now condition #12) has been revised to be consistent with District Rule 4624, as suggested. The citation of the source of origin and authority for this requirement has been replaced by District Rule 4624, 5.4

#### 26. EPA COMMENT

The District needs to clarify whether the monthly leak inspection requirements in condition 8 applies only to gasoline delivery vessels. Additionally, the District must also include a monthly inspection requirement for excess organic liquid drainage. The last sentence in the condition 8 should read: "Instrument detection shall <u>be</u> measured...."

#### DISTRICT RESPONSE

The leak inspection requirement, pursuant to District Rule 4624, section 3.6 and 5.4 applies to all organic loading and vapor collection systems, including gasoline loading. The specific reference to "gasoline" loading and vapor collection systems has been deleted.

Regarding organic liquid drainage, please refer to the District Response to EPA Comment #9.

The typographical error in the last sentence in condition #8 (now condition #13) has been corrected.

#### 27. EPA COMMENT

The District must add a condition to monitor the facility throughput to ensure that is remains below 20,000 gallons on a daily basis so that the NSPS permit shield remains valid.

#### DISTRICT RESPONSE

The following condition has been added to this permit:

- Loading throughput of organic liquid, with a TVP of 1.5 psia or greater shall not exceed 20,000 gallons on any one day at this loading facility. Monitoring records of daily throughput shall be maintained to demonstrate compliance. [District Rules 4624, 3.3 and 2520, 9.4.2]

#### 28. EPA COMMENT

The District must add a permit condition to prohibit sources qualifying to use this template from operating in a manner that would trigger District Rule 4622 (transfer of gasoline into vehicle fuel tanks) since there is a permit shield for the rule.

#### DISTRICT RESPONSE

Please refer to the District Response to EPA Comment #7.

#### 29. EPA COMMENT

The District must add a condition to address District Rule 4621, section 5.3.3, which prohibits purging of gasoline vapors into the atmosphere. Section 5.4 of this rule also requires that sources "comply with all safety, fire, weights and measures, and other applicable codes and/or regulations." The District should determine whether this includes air-pollution related requirements that must be included in the permit.

#### **DISTRICT RESPONSE**

The District has added the following requirement to the template to address the requirement of District Rule, section 5.3.3:

Gasoline vapors shall not be purged into the atmosphere. [District Rule 4621, 5.3.3]

Regarding the requirements of section 5.4 of the rule, the District maintains this requirement contains no air-pollution related requirements that must be included in the permit. This is simply a general "liability" clause which is also contain, and in fact originated from, all of the CARB Executive Orders certifying the Phase I and II Vapor Recovery Systems.

#### 30. EPA COMMENT

During a discussion on June 23, 1997, EPA made a verbal comment requesting the District to add a requirement to both templates LR-1-0 and LR-2-0 for sources to

permanently install a pressure guage or magnehelic device on the vapor recovery systems to detect blockages in the system.

#### DISTRICT RESPONSE

We are not aware of any significant number of blockages occuring at Title V facilities in our District. Should a blockage occur the pressure in the vapor recovery and control system may elevate resulting in the increase potential for leaks, including leaks due to an open delivery tank pressure relief valve. The District believes the currently proposed quarterly leak inspection requirements adequately address concerns for leaks due to blockage. In response to EPA's concerns the Disrict changed the followup monitoring frequency for a well maintained system from annual to semiannually. Additionally the delivery vessel is required to be vapor tight and be tested annually. The vapor recovery and control system must be tested annually to insure complinace with collection and emission requirements. However, the District has added the following prohibition to the template conditions, to help insure the vapor recovery system is functioning properly and vapors are not released to atmosphere:

- Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1]

# APPENDIX D

# TEMPLATE QUALIFICATION FORM FOR TEMPLATE # SJV-LR-2-0

# **Title V General Permit Template Qualification Form**

ga ne Is	Description of Qualifying Units this unit located at a facility used exclusively for the loading of less than 4,000 allons of organic liquids in any one day? [District Rule 4624, 2.0] If "no", continuent question; otherwise STOP - you cannot use this template. this unit located at a facility which, either by design capacity or enforceable
ne Is	
Is	
	this unit located at a facility which, either by design capacity or enforceable
	andition, have a throughput of less than 20,000 gallons (see Appendix A) of an
	ganic liquid in one day into tank trucks, trailers, or railroad tank cars? [District Ru
	624, 3.3 and 40CFR§60.500] If "yes", continue to next question; otherwise STOF
	ou cannot use this template.
	the true vapor pressure at actual loading temperature of all organic liquids being aded less than 1.5 psia? [District Rule 4624, 3.7] If "no", continue to next questi
	herwise STOP - you cannot use this template.
	this unit located at a gasoline bulk plant (see Appendix A) which is subject to
	strict Rule 4621 (Gasoline Transfer into Stationary Storage Containers, Gasoline
	elivery Vessels and Gasoline Bulk Plants)? [District Rule 4624, 2.0 and 3.5] If "r
	intinue to next question; otherwise STOP - you cannot use this template.
Do	bes the vapor collection and control system consist of a device which returns
со	illected vapors to a product storage tank only? If "yes", continue to next question
	herwise STOP - you cannot use this template.
	the organic liquid being loaded into a vehicle fuel tank? [District Rule 4622, 1.0
	ad 3.7 ] If "no", continue to next question; otherwise STOP - you cannot use this
	mplate.
	the facility currently in full compliance with District Rule 4624? [District Rule 466
	temption, pursuant to section 4.2] If "no", STOP - you cannot use this template;
Ott	herwise you qualify to use this template.